

CLAIMS

1. A method of establishing a communication connection for traffic between a user
equipment and a network, comprising: transmitting a communication connection
5 request from the user equipment to a network element, the request including an
indication of a preferred communication connection; receiving a least a part of
said request at the network element; selecting at the network element a
communication connection for the traffic; and communicating the selected
communication connection to the user equipment.
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2. A method according to claim 1 wherein the communication connection is a PDP
context.
3. A method according to claim 2 wherein the step of communicating comprises
15 transmitting a message to the user equipment identifying the selected PDP
context.
4. A method according to claim 2 wherein the step of communicating comprises
20 transmitting a message to the user equipment identifying the non-selected PDP
context.
5. A method according to any one of claims 2 to 4 wherein the step of selecting the
PDP context is dependent upon the preferred PDP context and the PDP contexts
supported by the network.
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6. A method according to claim 5 wherein the step of communicating comprises transmitting a message to the user equipment confirming that the preferred PDP context is selected.
- 5 7. A method according to claim 5 wherein the step of communicating comprises transmitting a message to the user equipment rejecting the preferred PDP context.
8. A method according to claim 5 wherein the message identifies an alternative to
10 the preferred PDP context.
9. A method according to any one of claims 2 to 8 wherein the step of selecting comprises determining the type of traffic to be transmitted on the PDP context.
- 15 10. A method according to any one of claims 2 to 9 wherein the step of selecting comprises selecting a first PDP context for a first set of traffic type and selecting a second PDP context for a second set of traffic type.
11. A method according to claim 9 or claim 10 wherein the step of communicating
20 includes communicating the allowed traffic types to the user equipment.
12. A method according to any one of claims 2 to 11 wherein the traffic is signalling traffic.
- 25 13. A method according to any one of claims 2 to 12 wherein the at least two PDP contexts include a dedicated signalling PDP context and a general purpose PDP context.

14. A method according to any one of claims 2 to 13 further comprising the step of
receiving the PDP request from the user equipment at a further network element,
5 and transmitting the PDP request from the further network element to the network
element.
15. A method according to claim 14 wherein the further network element removes the
preferred PDP context from the request such that the request transmitted from the
10 further network element to the network element does not include an indication of
a preferred PDP context.
16. A method according to any one of claims 2 to 15 wherein the step of
communicating includes transmitting a cause code or signalling flag.
- 15 17. A method according to claim 1 or claim 2 wherein the communication request
identifies an emergency connection request.
18. A method according to claim 17 when dependent upon claim 2 wherein the
20 communication request identifies an emergency PDP context.
19. A method according to claim 17 or claim 18 wherein the selection of the
communication for the traffic is dependent upon a network policy.
- 25 20. A method of establishing a PDP context for signalling traffic between a user
equipment and a network, comprising: receiving a first PDP request from the user
equipment at a first network element, the PDP request including an identity of a

5 preferred PDP context; receiving a second PDP request from the first network element at a second network element, the second PDP request including at least part of the first PDP request; selecting, at the second network element, a PDP context for the signalling traffic; and confirming the selected PDP context to the user equipment.

10 21. A method according to claim 20, wherein the second PDP request includes the identity of the preferred PDP context, wherein the second network element selects the PDP context in dependence on the preferred PDP context and the PDP contexts supported by the network.

15 22. A method according to claim 20, wherein the second PDP request does not include the identity of the preferred PDP context, wherein the second network element selects the PDP context in dependence on PDP contexts supported by the network.

23. A method according to claim 22 wherein the selected PDP context is a default PDP context.

20 24. A method according to any one of claims 21 to 23 wherein the selected PDP context includes one of a dedicated signalling PDP context and a general purpose PDP context.

25 25. A method according to any one of claims 21 to 24 wherein the step of confirming comprises transmitting a cause code to the user equipment.

- 26.A method according to claim 20 wherein the preferred PDP context is an emergency PDP context,
- 27.A computer program product for storing computer program code adapted to perform the method of any one of claims 2 to 26.
- 28.A network element for determining a communication connection for traffic between a user equipment and a network, comprising: means for receiving a communication connection request from the user equipment; means for selecting a communication channel for the traffic; and means for communicating the selected communication to the user equipment.
- 29.A network element according to claim 28 wherein the communication channel is a PDP context.
- 30.A network element according to claim 28 or claim 29 wherein the communication channel request includes an identity of a preferred communication channel.
- 31.A network element according to claim 28 or claim 30 wherein the means for communicating is adapted to transmit a message to the user equipment identifying the selected PDP context.
- 32.A network element according to claim 28 or claim 30 wherein the means for communicating is adapted to transmit a message to the user equipment identifying the non-selected PDP context.

33. A network element according to any one of claims 28 to 32 wherein the means for selecting one of at least two PDP contexts is responsive to the PDP contexts supported by the network.

5 34. A network element according to claim 33 wherein the PDP request includes an identity of a preferred PDP context, the means for selecting being further responsive to the preferred PDP context.

10 35. A network element according to claim 34 wherein the means for communicating is adapted to transmit a message to the user equipment confirming that the preferred PDP context is selected.

15 36. A network element according to any one of claims 29 to 35 wherein the means for selecting comprises means for determining the type of traffic to be transmitted on the PDP context.

20 37. A network element according to any one of claims 29 to 36 wherein the means for selecting comprises means for selecting a first PDP context for a first set of signalling types and means for selecting a second PDP context for a second set of signalling types.

25 38. A network element according to claim 36 or 37 wherein the means for communicating is adapted to communicate the allowed traffic types to the user equipment.

39. A network element according to any one of claims 29 to 38 wherein the traffic is signalling traffic.

40. A network element according to any one of claims 29 to 39 wherein the PDP contexts include a dedicated signalling PDP context and a general purpose PDP context.
- 5 41. A network element according to any one of claims 29 to 40 comprising a gateway GPRS support node.
- 10 42. A network element according to claim 41 wherein the means for requesting is connected to receive the PDP request from a serving GPRS support node.
43. A network element according to claim 34 wherein the preferred communication channel is an emergency communication channel.
- 15 44. A network element for determining a PDP context for traffic between a user equipment and a network, comprising: means for receiving a first PDP request from the user equipment at a first network element, the first PDP request including an identity of a preferred PDP context; means for receiving a second PDP request from the first network element at a second network element, the
20 second PDP request including at least part of the first PDP request; the second network element including means for selecting a PDP context for the traffic; and means for confirming the selected PDP context to the user equipment.
- 25 45. A network element according to claim 44 wherein the second PDP request includes the identity of the preferred PDP context, the means for selecting being dependent upon the preferred PDP context and the PDP contexts supported by the network.

46. A network element according to claim 45 wherein the second PDP request does not include the identity of the preferred PDP context, wherein the second network element selects the PDP context in dependence on PDP contexts supported by the network.

47. A network element according to claim 46 wherein the selected PDP context is a default PDP context.

48. A network element according to any one of claims 44 to 47 wherein the selected PDP context is one of a dedicated signalling PDP context and a general purpose PDP context.

49. A network element according to any one of claims 44 to 48 wherein the first network element is a SGSN and the second network element is a GGSN.

50. A network element according to claim 49 wherein the message is a cause code to the user equipment.

51. A network element according to claim 44 wherein the preferred PDP context is an emergency PDP context.

52. A communication system including a serving GPRS support node for receiving a PDP request from a user equipment, the PDP request including an identity of a preferred PDP context; and a gateway GPRS support node for receiving a PDP request from the serving GPRS support node, wherein the gateway GPRS support node is adapted to select a dedicated signalling PDP context or a general

purpose PDP context for signalling traffic between the user equipment and the communication system in dependence upon the PDP contexts supported by the network and to confirm the selected PDP context to the user equipment.

- 5 53.A communication system according to claim 52 wherein the gateway GPRS support node receives the PDP request from the serving GPRS node including the identity of preferred PDP context, the gateway GPRS support node being further adapted to select the signalling PDP context in further dependence on the identity of the preferred PDP context.

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- 54.A cause code for a communication system in which a PDP context is to be established traffic between a user equipment and a network, the PDP context being established by: receiving a PDP request from the user equipment at a network element; selecting a dedicated signalling PDP context or a general
15 purpose PDP context for the traffic; and confirming the selected PDP context to the user equipment using the cause code.

- 55.A cause code for a 3GPP R5 communication system which indicates a signalling PDP context activated by a network to a user equipment.

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